

In re Patent Application of:
ENRIQUEZ ET AL
Serial No. 10/090,291
Filed: MARCH 4, 2002

In the Claims:

1. - 14. (Cancelled)

15. (Currently Amended) A circuit arrangement for limiting the DC voltage applied to tip and ring amplifiers of a subscriber line interface circuit (SLIC), each having a first polarity input thereof coupled to a first current flow path to which a DC input voltage is coupled, said circuit arrangement comprising:

a first current source that is operative to supply, to a second polarity input node of said tip amplifier, a first current derived in accordance with that flowing through said first current flow path and independent of the output of said tip amplifier;

a second current source that is operative to supply, to a second polarity input node of said ring amplifier, a second current derived in accordance with that flowing through said first current flow path and independent of the output of ring amplifier; and

a voltage regulator coupled with said first current flow path and being operative to regulate the voltage at said first polarity input of said tip/ring amplifier to a prescribed value of regulated voltage V_{reg} , such that for said DC input voltage having a voltage value less than said prescribed value of regulated voltage V_{reg} , the voltage at said first polarity input has said voltage value less than said prescribed value of regulated voltage V_{reg} , and such that for said DC input voltage having a

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voltage value at or above said prescribed value of regulated voltage Vreg, the voltage at said first polarity input is limited to said prescribed value of regulated voltage Vreg, so that the magnitudes of said first and second currents supplied by said first and second current sources, respectively, are based upon said regulated voltage value Vreg, irrespective of said DC input voltage exceeding said regulated voltage value Vreg.

16. (Original) The circuit arrangement according to claim 15, further including first and second low pass filters respectively coupled with said first and second current sources and being operative to pass DC supply energy and prevent noise from being introduced into the voice paths of said tip and ring amplifiers.

17. (Original) The circuit arrangement according to claim 15, wherein said first current flow path comprises a voltage divider to an input terminal of which said DC input voltage is applied, and to a voltage dividing node of which said first polarity inputs of said tip and ring amplifiers are coupled, and wherein said voltage regulator is coupled to said input terminal of said voltage divider.

18. (Original) The circuit arrangement according to claim 17, wherein said first and second current sources are operative to supply said first and second currents in accordance with that

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flowing through said voltage divider between said voltage dividing node and a reference node.

19. (Original) The circuit arrangement according to claim 15, wherein said first current flow path comprises a voltage divider to an input terminal of which said DC input voltage is applied, and to a voltage dividing node of which said first polarity inputs of said tip and ring amplifiers are coupled, and wherein said voltage regulator is coupled to said voltage dividing node of said voltage divider.

20. (Original) The circuit arrangement according to claim 19, wherein first and second current sources are operative to supply said first and second currents in accordance with that flowing through said voltage divider between said voltage dividing node and a reference node.